1. **Example: A Simple Framed Window**

```java
import java.awt.*;

import javax.swing.*;

public class SwingTest {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Test Frame");

        frame.setSize(new Dimension(300,200));

        frame.setLocation(100,100);

        frame.setVisible(true);

    }

}
```

Adding Color

The java.awt.Color class has the following static fields (data members):

- **Color.black**
- **Color.blue**
- **Color.cyan**
- **Color.darkGray**
- **Color.gray**
- **Color.green**
- **Color.lightGray**
- **Color.magenta**
- **Color.orange**
- **Color.pink**
- **Color.red**
- **Color.white**
- **Color.yellow**

2. Example: Changing Background Color

```java
import java.awt.*;

import javax.swing.*;

public class SwingTest {
```

```java
    public static void main(String[] args) {

        JFrame frame = new JFrame("Test Frame");

        frame.setSize(new Dimension(300,200));

        frame.setLocation(100,100);

        Container contentPane = frame.getContentPane();

        contentPane.setBackground(Color.red);

        frame.setVisible(true);

    }

}
```

3. Example: Adding a Label and Button

```java
import java.awt.*;

import javax.swing.*;

public class SwingTest {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Test Frame");

        frame.setSize(new Dimension(300,200));

        frame.setLocation(100,100);

        Container contentPane = frame.getContentPane();

        JLabel label = new JLabel("HERE IS A LABEL");

        contentPane.add(label, BorderLayout.NORTH);

        JButton button = new JButton("BUTTON");

        contentPane.add(button, BorderLayout.SOUTH);

        frame.setVisible(true);

    }


}
```

4. Example: Adding a List of Options


```java
import java.awt.*;

import javax.swing.*;
```

```java
public class SwingTest {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Test Frame");

        frame.setSize(new Dimension(300,200));

        frame.setLocation(100,100);

        Container contentPane = frame.getContentPane();

        JLabel label = new JLabel("HERE IS A LABEL");

        contentPane.add(label, BorderLayout.NORTH);

        JButton button = new JButton("BUTTON");

        contentPane.add(button, BorderLayout.SOUTH);

        String[] options = {"Option 1", "Option 2",

                    "Option 3"};

        JList list = new JList(options);

        contentPane.add(list, BorderLayout.CENTER);

        frame.setVisible(true);

    }

}
```

5. Example: Adding a Check Box and Slider

```java
public class SwingTest {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Test Frame");

        frame.setSize(new Dimension(400,200));

        frame.setLocation(100,100);

        Container contentPane = frame.getContentPane();

        JLabel label = new JLabel("HERE IS A LABEL");

        contentPane.add(label, BorderLayout.NORTH);

        JButton button = new JButton("BUTTON");

        contentPane.add(button, BorderLayout.SOUTH);

        String[] options = {"Option 1", "Option 2", "Option 3"};

        JList list = new JList(options);

        contentPane.add(list, BorderLayout.CENTER);
```

```java
        JCheckBox cbox = new JCheckBox("Check");

        contentPane.add(cbox, BorderLayout.WEST);

        JSlider slider = new JSlider();

        contentPane.add(slider, BorderLayout.EAST);

        frame.setVisible(true);

    }

}
```

6. Example: Changing the Layout

```java
public class SwingTest {

    public static void main(String[] args) {

        JFrame frame = new JFrame("Test Frame");

        frame.setSize(new Dimension(300,200));

        frame.setLocation(100,100);

        Container contentPane = frame.getContentPane();

        contentPane.setLayout(new FlowLayout());

        JLabel label = new JLabel("HERE IS A LABEL");

        JButton button = new JButton("BUTTON");

        String[] options = {"Option 1", "Option 2", "Option 3"};

        JList list = new JList(options);

        JCheckBox cbox = new JCheckBox("Check");

        JSlider slider = new JSlider();

        contentPane.add(label);

        contentPane.add(button);

        contentPane.add(list);

        contentPane.add(cbox);

        contentPane.add(slider);

        frame.setVisible(true);

    }

}
```

7. Example: JPanel Example

```
JFrame frame = new JFrame("Test Frame");

    frame.setSize(new Dimension(300,200));

    frame.setLocation(100,100);

    Container contentPane = frame.getContentPane();

    JLabel label = new JLabel("HERE ARE SOME BUTTONS",

                    SwingConstants.CENTER);

    JButton button1 = new JButton("BUTTON1");

    JButton button2 = new JButton("BUTTON2");

    JButton button3 = new JButton("BUTTON3");


    JPanel panel = new JPanel();

    panel.add(button1);

    panel.add(button2);

    panel.add(button3);

    contentPane.add(label, BorderLayout.NORTH);

    contentPane.add(panel, BorderLayout.CENTER);

    frame.setVisible(true);
```

8. Example: Changing JPanel Layout

```
JFrame frame = new JFrame("Test Frame");

    frame.setSize(new Dimension(300,200));

    frame.setLocation(100,100);

    Container contentPane = frame.getContentPane();

    JLabel label = new JLabel("HERE ARE SOME BUTTONS",

                    SwingConstants.CENTER);

    JButton button1 = new JButton("BUTTON1");

    JButton button2 = new JButton("BUTTON2");

    JButton button3 = new JButton("BUTTON3");
```

```
JPanel panel = new JPanel();

panel.setLayout

    (new BoxLayout(panel, BoxLayout.Y_AXIS));

panel.add(button1);

panel.add(button2);

panel.add(button3);

contentPane.add(label, BorderLayout.NORTH);

contentPane.add(panel, BorderLayout.CENTER);

frame.setVisible(true);
```

9. Tweaking Example

```
JFrame frame = new JFrame("Test Frame");

    frame.setSize(new Dimension(300,200));

    frame.setLocation(100,100);

    Container contentPane = frame.getContentPane();

    LayoutManager lm = contentPane.getLayout();

    ((BorderLayout)lm).setHgap(25);

    JLabel label = new JLabel("HERE ARE SOME BUTTONS",

                    SwingConstants.CENTER);

    JButton button1 = new JButton("BUTTON1");

    JButton button2 = new JButton("BUTTON2");

    JButton button3 = new JButton("BUTTON3");


    JPanel panel = new JPanel();

    panel.setLayout(new BoxLayout(panel, BoxLayout.Y_AXIS));

    panel.add(button1);

    panel.add(button2);

    panel.add(button3);

    contentPane.add(label, BorderLayout.NORTH);
```

```
      contentPane.add(panel, BorderLayout.CENTER);

      frame.setVisible(true);
```

10. Example: Containment Hierarchy of a Menu

```java
import java.awt.*;

import java.awt.event.*;

import javax.swing.*;


public class MenuExample {
  public static void main(String[] args) {
    JFrame frame = new JFrame("My Frame");
    frame.setDefaultCloseOperation(
      JFrame.EXIT_ON_CLOSE);
    JMenu fileMenu = new JMenu("File");
    fileMenu.add(new JMenuItem("New"));
    fileMenu.add(new JMenuItem("Open"));
    fileMenu.add(new JMenuItem("Close"));
    JMenu editMenu = new JMenu("Edit");
    editMenu.add(new JMenuItem("Undo"));
    editMenu.add(new JMenuItem("Redo"));
    editMenu.add(new JMenuItem("Cut"));
    JMenuBar menubar = new JMenuBar();
    menubar.add(fileMenu);
    menubar.add(editMenu);
     frame.setJMenuBar(menubar);
    frame.setVisible(true);
}}
```